

## Sriraman, Nikhil

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**From:** Wesner-Early, Caryn (ASRC)  
**Sent:** Wednesday, July 01, 2009 10:55 AM  
**To:** Sriraman, Nikhil  
**Subject:** results of Fast & Focused search for SN 10/540,587

**Attachments:** Picture (Metafile); Picture (Metafile); Picture (Metafile)



These came from a Scirus search using this strategy:  
robot solar (modular OR cellular OR self-assembling) ("robotics and automation")

### Modular Optimization for Robotic Explorers Kimberly Shillcutt.... [PS-318K]

May 2000

...should occur. For example, the **solar** power gain depends on the location...the sun as compared to the **robot**, so a large enough change in the **robot** or sun's location can produce a large change in a given plan's **solar** power gain value. A threshold...project which may utilize this **modular** optimization planner is...  
[<http://www.frc.ri.cmu.edu/projects/meteorobot/Project/...>]

<http://www.scirus.com/srsapp/sciruslink?src=web&url=http%3A%2F%2Fwww.frc.ri.cmu.edu%2Fprojects%2Fmeteorobot%2FProject%2FAAAIsymp.ps>

### Autonomous Rovers for Mars Exploration § Richard Washington 1, Keith... [PS-4MB]

Aug 2002

...depend on how much time is spent in shade and on the tilt of the **solar** panels, which in turn depends on the surrounding landscape...setting presents. For example, the main contribution of the Ambler **robot** is a novel form of legbased locomotion [4]. This work is complementary...

[corrected link] <http://ti.arc.nasa.gov/people/de2smith/publications/MarsSociety98.pdf>

This one was found on Scirus using this strategy:  
robot solar (magnetic OR electromagnetic) (modular OR cellular OR self-assembling)  
("actuators")

### TECHNOLOGY FOR AUTONOMOUS SPACE SYSTEMS Ashley W. Stroupe Sanjiv... [PDF-2MB]

Sep 2002

...151 5.2.3 **Robot** Team Coordination...operating in space, having sensors, **actuators**, its own control loop closure...autonomy, team coordination, **robot** worksystems, and robotic exploration...means of modeling either the **robot** system or the environment in... [<http://www.frc.ri.cmu.edu/~ssingh/pubs/spaceTechTR00-0...>]

I found this on Google Scholar using this strategy:  
robot solar (magnetic OR electromagnetic) (modular OR cellular OR self-assembling OR reconfigurable)

### **Self-replicating robots for lunar development**

GS Chirikjian, Y Zhou, J Suthakorn - IEEE/ASME transactions on mechatronics, 2002 - ieeexplore.ieee.org  
... of using lunar resources for **solar** energy production ... be purely **electromagnetic** with its **magnetic** field induced ... sen- sitive to radiation) each **robot** brain could ...  
[http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=1159224](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=1159224)

I found this on Google Scholar using this strategy:  
robot "solar power" (magnetic OR electromagnetic) (modular OR cellular OR self-assembling OR reconfigurable)

### **Cooperative manipulation testbed: A facility for space robot control system development**

W Bluethmann, F Rehmark, T Nguyen, H Aldridge - International Symposium on Artificial Intelligence, Robotics ..., 2001 - robotics.estec.esa.int  
... a parallel jaw gripper, a **magnetic** end effector ... Space **solar power** satellites (SSP) are being studied for ... Mellon University is building a **robot**, named Skyworker ...  
<http://pdf.aiaa.org/GetFileGoogle.cfm?gID=22573&gTable=Paper>